ABSTRAK

Tujuan penelitian ini adalah untuk menentukan waktu dan suhu pemanggangan yang tepat serta interaksinya terhadap karakteristik *gluten free cookies black mulberry*.

Penelitian dilakukan dengan menggunakan Rancangan Acak Kelompok (RAK) yang terdiri dari 2 faktor w (waktu pemanggangan) yang terdiri dari 3 taraf yaitu w_1 (140^0C), w_2 (150^0C), w_3 (160^0C) dan faktor s (suhu pemanggangan) yang terdiri dari 3 taraf yaitu s_1 (15 menit), s_2 (25 menit), s_3 (35 menit). Respon dalam penelitian adalah respon organoleptik (warna cokelat, aroma khas *cookies*, kerenyahan, rasa manis dan *after taste* pahit), respon fisik (kekerasan tekstur) respon kimia (protein, kadar pati, kadar air dan lemak) serta uji aktivitas antioksidan terhadap perlakuan terpilih.

Berdasarkan hasil penelitian, dapat diketahui bahwa waktu dan suhu pemanggangan berpengaruh terhadap kadar pati, serta interaksi waktu dan suhu pemanggangan berbeda nyata terhadap warna cokelat, aroma khas *cookies*, kerenyahan, rasa manis, *after taste* pahit, kekerasan tekstur, protein, kadar air dan lemak.

Perlakuan terpilih untuk aktivitas antioksidan pada produk *cookies black mulberry* dengan waktu dan suhu pemanggangan yaitu w_1s_2 sebesar 4542, 661 ppm, w_3s_1 sebesar 2929,697 ppm dan w_3s_2 sebesar 2591,849 ppm (lemah).

Kata kunci : *cookies*, suhu pemanggangan, waktu pemanggangan

ABSTRACT

The purpose of this study is to determine the exact time and temperature of roasting and its interaction with the characteristics gluten free of black mulberry cookies.

This research is conducted by using Group Random Design (RAK) which consist of 2 w factors (roasting time) consisting of 3 levels, those are w1 (140^0C), w2 (150^0C), w3 (160^0C) and s factor (roasting temperature) consisting of 3 levels, those are s1 (15 minutes), s2 (25 minutes), s3 (35 minutes). The Response in the study are organoleptic response (brown color, typical cookies, crisp, sweet taste and bitter after taste), physical response (texture hardness) chemical response (protein, starch content, moisture content and fat) and antioxidant activity test against selected treatment.

Based on the results of the research, it can be seen that the roasting time and temperature affect the starch content, as well as the interaction of the time and temperature of the roasting effect on the color of chocolate, the typical aroma of cookies, crispness, sweetness, bitter after taste, texture hardness, protein, moisture and fat content.

The selected treatment is blackberry mulberry cookies of antioxidant activity with time and roasting temperature are w_1s_2 of 4542, 661 ppm, w_3s_1 of 2929,697 ppm and w_3s_2 of 2591,849 ppm (weak).

Keywords: cookies, roasting temperature, roasting time